REMARKS

The Examiner rejected claims 1-16 and 26 as being anticipated by Kamieniecki et al., U.S. Patent No. 5,091,691.

Kamieniecki et al. disclose an apparatus for making AC surface photovoltage (SPV) measurements of a specimen of semiconductor material under dc bias voltage conditions. Referring to FIG. 17, Kamieniecki et al. disclose an electrode assembly 199 that supports a light 43 that illuminates a specimen 11 during the measurement process. A set of piezoelectric actuators 215, 217, 219 located within the electrode assembly 199 are used to maintain the desired separation and parallelism between reference electrode 203 and specimen 11. As it may be observed, the piezoelectric actuators 215, 217, and 219 adjust the alignment of the electrode assembly. Kamieniecki et al. further disclose a specimen 11 seated on a support plate 19.

Claim 1 has been amended to patentably distinguish over Kaminiecki et al. by claiming a chuck for a probe station having a first chuck assembly element and another chuck assembly element wherein a chuck spacing mechanism having exactly three independent supports <u>interconnecting the first chuck assembly element and the another chuck assembly element</u> defining the spacing between the first chuck assembly element and the another chuck assembly element.

As previously noted, Kamienicki et al. fail to disclose first and another chuck assembly elements with a chuck spacing mechanism having exactly three independent supports <u>interconnects the first chuck assembly element and the another chuck assembly element</u> defining the spacing there between. In contrast, Kamienicki et al. disclose a support plate 19 without any such chuck spacing mechanisms.

Claims 2-16 and 26 depend from claim 1, either directly or indirectly, and are patentable for the same reasons asserted for claim 1.

The Examiner rejected claims 1-16 and 26 as being anticipated by Fujihara et al., U.S. Patent No. 5,410,259.

Fujihara et al. disclose a probe apparatus that includes a test head, a probe card having a plurality of probe needles electrically connected to the test head, a table for supporting the wafer, a camera, and three leg members for driving the table plate such that the table plate is parallel to the probe card. In particular Fujihara et al. teach that the support unit supports a spherical bottom surface of the table plate 41 at a plurality of points, e.g., three points. See, column 4, lines 55-61. Accordingly, Fujihara et al. disclose a relatively thick spherical bottom surfaced table plate 41, which is especially suitable for maintaining a relatively flat upper surface for supporting the wafer thereon because its spherical structure is inherently resistive to warping.

Claim 1 has been amended to patentably distinguish over Fujihara et al. by claiming a first chuck assembly element that defines a substantially planar upper surface thereon suitable to support a wafer and defines a <u>substantially planar lower surface</u>. Another chuck assembly element defines a <u>substantially planar upper surface</u>. A chuck spacing mechanism that has exactly three independent supports interconnects the first chuck assembly element and the another chuck assembly element defining the spacing between <u>in such a manner that the substantially planar lower surface of the chuck assembly element and the substantially planar upper surface of the another chuck assembly element are in opposing relationship with respect to one another</u>.

Unlike the spherical bottom surfaced table plate 41 taught by Fujihara et al. which is inherently resistive to warping, other types of chucks have relatively thin chuck assembly elements that are susceptible to warping. In addition, the spherical bottom surfaced table plate 41 taught by Fujihara et al. tends to provide different capacitances depending on the depth of the spherical bottom surface beneath the particular point of measurement.

The present inventors came to the realization that a three point securement system permits defining the orientation of the first chuck assembly element with respect to another chuck assembly element in a multi-layered chuck without inducing stress into the chuck

assembly element supporting the wafer. Accordingly, the spacing between the substantially planar upper surface of the another chuck assembly element and the substantially planar lower surface of the first chuck assembly element of the multi-layered chuck may be controlled to provide relatively uniform capacitance between the elements.

In contrast, as it may be observed, the spherical bottom surfaced table plate 41 taught by Fujihara et al. is not a multi-layered chuck, as claimed, also Fujihara et al. as illustrated by its design and its application does not express any concern for the ability to maintain relatively uniform capacitance for probing. Accordingly, there would be no motivation to use the three independent supports of Fujihara et al. in other multi-layered chucks.

Claims 2-16 and 26 depend from claim 1, either directly or indirectly, and are patentable for the same reasons asserted for claim 1.

The Examiner is respectfully requested to reconsider claims 1-16 and 26 and to pass the application to issue.

Respectfully submitted,

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CERTIFICATE OF MAILING

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